



Australian Government

Assessment Requirements for ICTTEN801 Plan a transmission network

Release: 1

Assessment Requirements for ICTTEN801 Plan a transmission network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- evaluate potential transmission options and select most suitable type of transmission network
- analyse effect of transmission path characteristics on transmission systems
- develop solutions for transmission impairments
- select appropriate testing regimes for transmission technologies
- determine key multiplexing features of transmission technologies
- develop transmission network work plan.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline impact of relevant legislation, codes, regulations and standards involved with planning networks
- explain alternating current and transmission line theory
- compare emerging telecommunications switching and transmission technologies
- define network capacity and capability management
- outline capacity limitation of various platforms
- explain commercial considerations of Access Network deployment
- outline common switching and transmission support services
- explore compatibility issues for new technologies and equipment
- evaluate currency of technology and equipment under consideration
- explain data transmission
- summarise digital multiplexing techniques and hierarchies
- clarify enterprise deployment rules

- explain exemption process criteria
- outline network topologies
- formulate product capability and availability that are allowable within a transmission network
- establish aspects of telecommunications when planning a network, including:
 - alarm management
 - bearers
 - performance monitoring systems
 - transmission:
 - architectures and geographical categorisation
 - information sources
 - technology and equipment
- determine a cost analysis for a planned network.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances should be typical of those experienced in the Telecommunications – Telecommunications Networks Engineering field of work and include access to:

- a site to plan transmission network
- equipment and system manuals and specifications
- legislation and documentation to plan a transmission network.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>